THE REMARKS

Claims 1-21, 24-45, 49-97 are in the application and subject to examination.

Applicant thanks the Examiner for the Examiner Interview on 5/21/09.

The claim amendments herein are believed consistent with the discussion during the interview.

The Amendments

Independent claims 1, 24, 53, 59, 81 and 83 have been amended to incorporate the salient limitations of claim 85 that appear to be the basis for allowance of claim 85.

Independent claims 1 and 24 have been further amended to delete a recitation of claimed benefits or advantages that are not believed to be necessary for allowance of these claims.

Independent claims 65 and 73 have been amended to incorporate the salient limitations of claims 85 and 87 that appear to be the basis for allowance of claims 85, 87.

The amendments to dependent claims 4, 27, 54, 60, 64, 66-72, 74-80, 82, 84 are made to conform with the foregoing amendments to the independent claims.

Allowed claims 85-87 have been amended for clarification and to remove implementation details that are not believed necessary for allowance of these claims. In addition, claim 87 has been changed to a system claim, and new claim 89 has been added as a method counterpart to system claim 87.

New claims 90-93 are dependent from claims 87 and 89, and recite steps or elements removed from these claims that are described in the specification as being optional.

New claims 94-97 are dependent from claims 87 and 89, and recite additional features of the claims.

No new matter is introduced by any of the above amendments, which largely consist of adding limitations from allowed claim 85 and 87, already deemed to be supported by the specification, to independent claims 1, 24, 53, 59, 65, 73, 81 and 83, and/or moving other limitations from allowed claims 85 and 87 to new claims 90-93.

To the extent, if any, it is necessary to demonstrate independent support for these amendments, Applicant believes all these amendments are supported by, for example, Figs. 2-4, the section entitled "Example Environment" set forth on pages 8-10 of the specification, Figs.

22

21-24, and related text at pages 25-29. Regarding new claims 94-97, these claims are supported, for example, at page 28, lines 26-27.

The Examiner is requested to enter the amendments and re-consider the application.

35 U.S.C. § 103 Rejection

Claims 1-19, 21, 24-44, 46, 49, 50, 81, 83, and 88 are rejected under 35 U.S.C. §103(a), as allegedly being unpatentable over Shankar et al. (US 2004/0066781, "Shankar") in view of Ryals et al. (US 6788671, "Ryals").

Independent Claim 1

Independent claim 1 has been amended as follows:

"A system, associated with a network entity, for communicating proprietary control information over one or more backplane connections, interconnecting two or more entitiesone or more I/O blades with one or more management/switching (MSM) blades comprising a network entity without functioning as a user interface, with the one or more backplane connections coupled to the one or more I/O blades through one or more backplane-side MAC controllers, and coupled to the one or more MSM blades through one or more backplane-side MAC controllers, comprising:"

Applicant believes these limitations are the basis for allowability of claim 85 and accordingly respectfully submits that claim 1 as well is allowable on the basis of these limitations. Furthermore, neither Shankar nor Ryals describe or suggest these limitations, considered singly or in combination.

Moreover, Applicant has deleted the clause, "deletions and re-creations of the packet header mitigate bandwidth limitations caused by the backplane connections and improve system throughput" from claim 1. This clause describes the benefits of the claim. Applicant therefore believes removal of this does not impact the patentability of the claim.

Accordingly, Applicant respectfully asserts that amended claim 1 is allowable.

Independent Claims 24, 81 and 83

Claim 24 is a method claim that has been amended in like manner to claim 1. Therefore, the aforementioned arguments for amended claim 1 also apply to amended claim 24. Accordingly, Applicant respectfully submits that amended claim 24 is allowable.

Claim 81 and 83 are a system and method claim, respectively, that have been amended in like manner to claim 1. Therefore, the aforementioned arguments for amended claim 1 also apply to amended claims 81 and 83. Accordingly, Applicant respectfully submits that amended claims 81 and 83 are allowable.

Dependent Claims 2-19, 21, 25-44, 46-50 and 88

Claims 2-19, 21, 25-44, 46-50 and 88 are directly or indirectly dependent on amended claims 1or 24. Applicant respectfully asserts that claims 2-19, 21, 25-44, 46-50 and 88 are allowable at least because they are based on a non-obvious base claim.

Dependent Claims 20 and 45

Claims 20 and 45 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Shankar in view of Ryals and further in view of Kalkunte et al. (US 2002/0012345, "Kalkunte").

Claims 20 and 45 are directly dependent on amended claims 1 or 24. Applicant respectfully submits that claims 20 and 45 are allowable at least because they are based on a non-obvious base claim.

Dependent Claims 51 and 52

Claims 51 and 52 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Shankar in view of Ryals and further in view of Williams (US 7031325, "Williams").

Claims 51 and 52 are directly dependent on amended claims 1 or 24. Applicant respectfully asserts that claims 51 and 52 are allowable at least because they are based on an allowable base claim.

Claims 53-64 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Shankar in view of Ryals and further in view of Bare (US 2003/0142685, "Bare").

Independent Claims 53 and 59

24

Claim 53 has been amended in like manner as claim 1 to recite the salient limitations of allowable claim 85 as follows:

"A system, associated with a network entity, for performing load balancing over a plurality of backplane connections, interconnecting ~~two or more entities comprising a network entity~~one or more I/O blades with one or more management/switching (MSM) blades without functioning as a user interface, with the one or more backplane connections coupled to the one or more I/O blades through one or more backplane-side MAC controllers, and coupled to the one or more MSM blades through one or more backplane-side MAC controllers, the system comprising:

first logic for receiving a packet at ~~a first entity~~any one of the one or more I/O blades or one or more MSM blades, mapping control information for the packet into one or more identifiers of at least one of the ~~one or more~~ plurality of backplane connections ~~coupling the first entity to a second entity, the first and second entities comprising a network entity~~, wherein the mapping occurs through a data structure configured to achieve a desired load balancing of packets over the plurality of backplane connections; and"

Applicant believes these limitations are the basis for allowability of claim 85 and accordingly respectfully submits that claim 53 as well is allowable on the basis of these limitations. Furthermore, neither Shankar, Ryals nor Bare describe or suggest these limitations, considered singly or in combination.

Claim 59 has been amended in like manner to claim 53.

Accordingly, Applicant respectfully asserts that amended claims 53 and 59 are allowable.

Claims 65-80, 82, and 84 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Shankar in view of Ryals and further in view of Lou et al. (US 7173935, "Lou").

Independent Claims 65 and 73

Independent claims 65 and 73 have been amended to incorporate the salient limitations of claims 85 and 87 that are believed to be the basis for allowance of these claims. In particular, claim 65 has been amended as follows and claim 73 has been amended in like manner to claim 65:

"A system for extending the number of ports of a switch in a network comprising:

a first switch coupled to a second switch and the first switch having a greater number n of network-side ports than the number m of network-side ports ~~m~~of the second switch;

25

first logic <u>associated with the first switch</u> for <u>determining if a packet received at a port of the first switch is an ingress packet or an egress packet, and, if the packet is an ingress packet,</u> storing in a layer of the packet above the physical layer an identifier of ~~a~~ <u>the</u> port of the first switch <u>at which the packet was received, and communicating the packet from the first switch to the second switch, and, if the packet is an egress packet, retrieving an identifier of a port of the first switch at which the packet it to be transmitted, and transmitting the packet over the network from the identified port of the first switch</u>; <u>and</u>

second logic ~~for communicating the packet between the first and second switches~~ <u>associated with the second switch for determining if a packet received at a port of the second switch is an ingress packet or an egress packet, and, if the packet is an egress packet, storing in a layer of the packet above the physical layer an identifier of a port of the first switch from which the packet is to be transmitted over the network, and communicating the packet from the second switch to the first switch, and, if the packet is an ingress packet, retrieving an identifier of a port of the first switch at which the packet was received over the network, copying or inserting the identifier into a packet header for the packet, and performing additional processing of the packet,</u>

wherein the second switch appears to the network to have n <u>network-side</u> ports rather than m <u>network-side</u> ports."

Furthermore, these limitations are neither taught nor suggested by Shankar, Ryals and Lou, considered singly or in combination. In particular, none of these references even address the problem overcome by the invention of claims 65 and 73, which is to couple a first switch having n network-side ports to a second switch having a smaller number m of network-side ports, and to add logic configured so that the second switch appears to the network to have n network-wide ports.

For example, the portion of Lou cited in the Office Action does not even disclose another switch. Although Lou mentions other switches elsewhere in the reference, (e.g. Fig. 25A, module 2510, Packet Switch), he does not describe a relationship between the switches as per claims 65 and 73 that would allow the second switch to appear to the network as having a greater number of network-side ports. The Examiner acknowledges that neither Shankar nor Ryals disclose this limitation.

For these reasons, Applicant respectfully submits that amended claims 65 and 73 are allowable.

26

Dependent Claims 66-72 and 74-80

Dependent claims 66-72 and 74-80 are directly or indirectly dependent on amended claims 65 or 73. Applicant respectfully asserts that claims 66-72 and 74-80 are allowable at least because they are based on a non-obvious base claim.

Allowable Subject Matter

Claims 85-87 are objected to as being dependent upon a rejected base claim, but indicated as being allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant has amended these claims to remove implementation details that are not believed necessary to the patentability of these claims. Moreover, regarding claims 87 and 89, which are system and method counterparts, new claims 90-93 have been added to carry forward steps or elements form these claims that are described in the specification as being optional. (*See, e.g.*, page 28, lines 1-2). It is not believed that any of these amendments impact the patentability of these claims. On that basis, Applicant respectfully submits that amended claims 85-87, and new claims 90-93, are allowable.

CONCLUSION

For all the foregoing reasons, Applicant believes that the application is now in good and proper condition for allowance. Early notification of allowance is earnestly solicited.

Respectfully submitted,

Date: June 17, 2009

/Robert C. Laurenson/
Robert C. Laurenson
Reg No. 34,206

HOWREY LLP
2941 Fairview Park Drive, Box 7
Falls Church, VA 22042
Tel: (650) 798-3548
Fax: (650) 798-3600